

CLAIMS

1 1. A filter kit for removable insertion into one of a rigid frames of a filter grid array
2 having a plurality of rigid frames disposed adjacent to one other, each frame having a central
3 opening and arranged in adjacent relationship to one another, said kit comprising in
4 combination;

5 a) a particulate air filter media component removably mounted in one of said
6 rigid frames, each filter media component provided with multiple, closed end pockets
7 opposing a frontal opening, said frontal opening having an outer edge defining a
8 circumference generally conforming to the circumference of the central opening of a
9 respective one of said rigid frames; and

10 c) mounting means independent of said filter media bag configured to
11 releasably hold said filter media component within one of said rigid frames, each including a
12 retaining ring member removably mounted in force transmitting engagement to an inner
13 edge of said rigid frame with a portion of said filter media component disposed near said
14 outer edge sealingly entrapped between said retainer ring member and the inner edge of said
15 rigid frame.

1 2. The filter kit defined in claim 1 further wherein said mounting means includes a rod
2 member removably disposed across said central opening of said frame and in engagement
3 with a rearwardly facing surface of said filter media component located between said

4 pockets and forwardly of said closed ends of said pockets to limit the degree of insertion of
5 said filter media component within said frame in a direction of the intended air flow directed
6 through said filter media component.

1 3. A method of removably mounting an air filter media component into a rigid frame
2 having four sides and inner edge defining a central opening which forms part of a multiple
3 frame filter grid, comprising the steps of:

4 a) placing a filter media component across the central opening of the rigid
5 frame with an outer edge portion of said filter media extending forwardly of the
6 inner edge of the central opening of said rigid frame;

7 b) providing a retaining ring independent of said filter media component and
8 placing said retaining ring in press-fit relationship to the inner edge of the central
9 opening of said frame to engage a portion of said filter media component which is
10 adjacent to said outer edge in force-transmitting relationship between said retaining
11 ring and the inner edges of said frame to releasably secure said filter media
12 component within said frame.

1 4. A method of mounting and dismounting a replaceable filter media component into a
2 rigid frame forming a portion of a multiple filter grid arrangement, said filter media
3 component having a shape providing a frontal opening communicating with at least two

4 pocket shaped areas extending beyond a downstream side of said frame comprising the steps
5 of:

6 a) placing a support rod across a central opening of the rigid frame having four
7 sides members defining inner edges surrounding said central opening;

8 b) inserting the filter media component having at least two pocket shaped areas
9 into said central opening of said frame with the pockets extending through said
10 central opening until a portion of said filter media component between said pockets
11 engages said support rod and aligns an outer edge of said filter media component
12 surrounding said frontal opening forwardly of the inner edges of said rigid frame;

13 c) placing a retaining ring member into engagement with a portion of said filter
14 media component and in a press-fit relationship with the inner edges of said frame to
15 releasably entrap a portion of said filter media component adjacent to the frontal
16 opening of said filter media component in a sealed relationship between the inner
17 edges of said rigid frame and said retaining ring;

18 d) upon exhaustion of the useful life of said filter media component, removing
19 said retaining ring member from engagement with said frame and then removing the
20 filter media component from said frame;

21 e) repeating steps (b) and (c) to place another filter media component in
22 operating relationship within said frame.